

**OPERATING PROCEDURE*****Use of Paralytic Agents***

Effective Date:

February 22, 2002

Revised:

Approved By:

Approved By Operational Medical Director:

BLS

1. Perform patient assessment as outlined in OP 6.2.00. Particular attention should be noted when assessing:
 - a. Level of consciousness
 - b. Airway status (clear, obstructed, etc.)
 - c. Circulatory status
 - d. Respiratory status
 - e. Level of respiratory distress
2. Clear the airway of any obstructions/foreign bodies. Use suction devices as needed (ALS providers should visualize the airway and use Magill Forceps as needed.)
3. Obtain "Room Air" SpO₂ and baseline lung sounds.
4. Administer Oxygen as indicated for hypoxia.
5. Use BLS airway adjuncts as needed to maintain airway.
6. Support respiratory status by ventilating with bag-valve-mask and 100% OXYGEN as needed.

ALS ONLY

7. Perform endotracheal intubation, via direct visualization, following OP 6.2.03 as well as the ACLS and EMT-P standards of care.
8. Patients who require intubation, and who present with one or more of the criteria listed below may be intubated using the rapid sequence method.
 - Intact gag reflex
 - Clenched down teeth
 - Conscious with severe respiratory distress
 - Head trauma
 - Otherwise unable to protect own airway

OPERATING PROCEDURE			No. 6.2.08
Effective Date: February 22, 2002	Revised:	Page <u>2</u> of <u>5</u>	

MEDICAL CONTROL ONLY

9. *Rapid Sequence Method*
 - a. *Assemble ET equipment and have suction device and proper sized OP airway on hand.*
 - b. *Ensure IV line (not saline lock) is secure and flowing*
 - c. *Place patient on SpO2 EKG, and blood pressure/heart rate monitors*
 - d. *Explain procedure to patient*
 - e. *Pre-oxygenate with 100% OXYGEN, using BVM if possible*
 - f. *Pre-medicate with LIDOCAINE 1.0 mg/kg in situations where intubation may increase ICP. (Reduce dosage to 0.5 mg/kg in patients presenting with CHF, liver disease, or >70 years old).*
 - g. *Pre-medicate pediatric patients with ATROPINE 0.02mg/kg. (min. dose 0.1mg)*
 - h. *Sedate patient. Slowly titrate VERSED 2.5 –10.0 mg until the initiation of slurred speech or inability to hold head up. Initial dosage shall be 2.5 to 5.0 mg over 20 seconds then evaluate the patient affect. If indicated, continue with 0.5 mg dosages given over 2 minutes until desired level of sedation is achieved. Up to 10 mg may be necessary. Pediatric dose is 0.02mg/kg.*
 - i. *Apply cricoid pressure (Sellick maneuver) prior to the administration of Succinylcholine and continue until cuff is inflated and tube placement is confirmed by auscultation*
 - j. *Administer SUCCINYLCHOLINE 1.5 mg/kg over 30 seconds. (Max. dose is 150 mg.). Allow time for fasciculation to cease. Pediatric dose is 2.0mg/kg up to age 10.*
 - k. *Perform endotracheal intubation, via direct visualization, following OP 6.2.03 as well as the ACLS and EMT-P standards of care.*
 - l. *Inflate the cuff (where applicable) and secure the endotracheal tube.*
 - m. *Monitor the patient closely. The duration of VERSED is approximately 15-60 minutes. The duration of SUCCINYLCHOLINE is 6-10 minutes.*

10. *Administer additional SUCCINYLCHOLINE or VERSED as directed to keep patient from compromising his or her airway.*

11. *The Difficult Airway*
If initial attempts to place the ET tube has failed, oxygenate the patient and place the Laryngeal Mask Airway-Fastrach.
 - a. *Choose appropriate size, check for damage and leaks*
 - b. *Fully deflate the LMA mask*
 - c. *Lubricate mask face with water soluble gel*
 - d. *Support the head and neck in a neutral position*
 - e. *Place the tip of the LMA against the hard palate and insert along the curvature of the pharynx*
 - f. *Inflate the mask with an appropriate amount of air for the size chosen*
 - g. *Oxygenate the patient with high % O2*
 - h. *Intubate through the LMA with the ET tube supplied with the unit*
 - i. *Confirm tube placement and monitor with appropriate equipment*

OPERATING PROCEDURE			No. 6.2.08
Effective Date: February 22, 2002	Revised:	Page <u>3</u> of <u>5</u>	

12. Surgical Airway

A. Indications

- 1. Inability to ventilate despite having attempted BVM with a BLS airway, ET placement and the LMA Fastrack.*
- 2. Inability to place ET in the setting of life-threatening upper airway hemorrhage.*
- 3. Complete upper airway obstruction that cannot be corrected with Magill Forceps and direct visualization.*

B. Preparation

- 1. Prepare suction and cricothyroidotomy kit.*
- 2. Begin at sternal notch and locate cricoid cartilage.*
- 3. Palpate cricothyroid membrane anteriorly between the cricoid cartilage and the thyroid cartilage.*
- 4. Prepare the skin with betadine or alcohol swabs*

C. Procedure

- 1. Stabilize the thyroid cartilage and make a vertical incision (1-2 cm) over the cricothyroid membrane.*
- 2. Puncture membrane with inductor, angle towards the chest.*
- 3. Use the attached syringe to confirm placement.*
- 4. Remove the syringe and inductor as a unit and push the housing unit against the skin.*
- 5. Insert the 2.5mm airway and remove trocar.*
- 6. Increase airway size as appropriate for patient.*
- 7. Oxygenate with BVM and high % O₂.*

13. Life threatening danger is defined as:

The patient is in inevitable danger of death if immediate intervention is not made. Patient should be suffering from one or more of the following conditions:

- a. Severe facial, neck and/or throat trauma preventing all conventional means of airway management.*
- b. Foreign body airway obstruction that is not removable by any means.*
- c. Severe laryngeal edema from a medical or traumatic condition that obstructs the airway, leaving it unmanageable by any other means.*

14. Complete ESA 40, and attach a copy of the EMS report for review. Forward to EMS Captain.

**City of Fairfax Fire Department
Analysis of Pre-Hospital Endotracheal Intubation**

Patient Name _____ Age _____ Sex _____ Weight _____ Date ____/____/____

Control Hospital _____ ED Physician _____

Medic 03 33 EMT-C-P

Incident # _____

- 1 Patient Situation _____ Medical _____
_____ Trauma _____
- 2 Route of Intubation _____ Oral _____ Nasal _____
- 3 ET tube size _____
- 4 Stylet Used? _____ yes _____ no
- 5 Type and size of blade used Miller _____
Macintosh _____
- 6 Pulse oximetry reading _____ pre-intubation
_____ post-intubation
- 7 Were lung sounds present and equal after intubation? _____ yes _____ no
- 8 What was the post intubation end tidal CO2 reading? _____
- 9 Were there any pre or post intubation complications? _____ yes _____ no
- 10 How many total attempts were made to intubate the patient? _____
- 11 Were paralytics needed to intubate the patient? _____ yes _____ no
- 12 How much Versed was administered to achieve sedation? _____ mg
- 13 How much Succinylcholine was given to achieve paralyzation? _____ mg
- 14 If unable to intubate the patient after paralyzation, which alternative
airway was used? _____ BVM only
_____ LMA (size _____)
_____ Nu-trake
- 15 Did you feel paralytics were needed and orders were denied? _____ yes _____ no
(If "yes", what was the name of the communication nurse and
control physician denying the order)

Comm. Nurse _____ Control Physician _____

Attach a copy of the medical report and forward to EMS Captain.

To be filled out by the Emergency Department Physician

- | | | |
|----|--|--|
| 16 | Was the ET tube placed properly upon arrival of the patient to the ED? | _____yes _____no |
| 17 | What was the patient's blood gases upon arrival at the ED? | |
| | _____PO2 _____Pco2 _____pH | |
| 18 | Were there any complications from the ET procedure?
(if "yes", explain below) | _____yes _____no |
| 19 | What was the pulse oximetry reading on arrival at the ED? | _____ % |
| 20 | Were there good bilateral lung sounds? | _____yes _____no |
| 21 | Was a chest x-ray done on this patient? | _____yes _____no |
| 22 | If "yes" to 21, was the tube in the correct position? | _____yes _____no |
| 23 | What was the final disposition of this patient? | _____ICU
_____CCU
_____OR
_____Floor
_____Morgue |

ED Physician's Name_____ **Signature**_____

Comments _____

[illegible]